RAIN!

At least in a few places

Tennessee has experienced one of its hottest and driest August's on Record. The average monthly temperature

in many locations exceeded the previous record by whole degrees (not tenths of a degree, very unusual). Below

are a three statements from the National Weather Service concerning the heat.

From	the	Nationa	l Wea	ather	Service	Office	in
Morristown							
	.DRIES	T AUGUST	EVER	AT TR	I-CITIES		

- Thunderstorms were scarce during August across most of east Tennessee, with Chattanooga and Tri-Cities reporting well-below-normal rainfall. In fact, Tri-Cities set their all-time driest August ever. However, Knoxville reported above-normal rainfall for August, with a daily rainfall record set on the 29th.
 - Chattanooga received 1.83 inches of rain in August, which was 3.59 inches below normal. It ranked as the 19th driest August on record at Chattanooga. Measurable precipitation fell on only seven days, with the greatest amount of 0.94 inches on the 28th. The driest August out of 129 years of observations at Chattanooga was back in 1929, when 0.45 inch was recorded.
 - Knoxville received 4.13 inches of rain in August, which was 1.24 inches above normal. It ranked as the 45th wettest August on record at Knoxville. Measurable precipitation fell on only seven days, but two of those days had more than an inch of rain. The heaviest rain fell on the 29th when 1.91 inches was received, which broke the daily record of 1.69 inches set last year. The wettest August at Knoxville was back in 1920, when 11.33 inches was recorded.
 - Tri-Cities received 0.37 inch of rain in August, which was 2.63 inches below normal. It ranked as the all-time driest August on record at Tri-Cities, breaking the previous record of 0.55 inch set back in 1987. Measurable precipitation fell on only five days, with the greatest amount of 0.28 inch on the 21st.

HOTTEST AUGUST EVER ACROSS EAST TENNESSEE

- The monthly-averaged temperatures for August were well above normal, with all-time records for August set across all of east Tennessee. In addition, August 2007 was the hottest month on record at Chattanooga and Knoxville. Several daily record highs were set at all three sites.
 - The monthly average temperature at Chattanooga was 85.7 degrees, which was 7.2 degrees above normal. It ranked as the all-time hottest August on record at Chattanooga, shattering the previous record of 82.7 degrees set last year. In addition, August was the hottest month ever at Chattnooga. Several daily record highs were broken on the 15th, 16th, 22nd, 23rd, and 24th.
 - The monthly average temperature at Knoxville was 83.2 degrees, which was 6.3 degrees above normal. It ranked as the all-time hottest August on record at Knoxville, breaking the previous record of 82.7 degrees set last year. In addition, August was the hottest month ever at Knoxville. Several daily record highs were broken on the 15th, 16th, 22nd, 23rd, and 24th.
 - The monthly average temperature at Tri-Cities was 79.0 degrees, which was 6.2 degrees above normal. It ranked as the all-time hottest August on record at Tri-Cities, breaking the previous record of 78.4 degrees set back in 1995. Several daily record highs were broken on the 19th,

20th, 23rd, and 24th.

.....From a Special Weather Statement from Nashville September 2nd......

...AUGUST 2007 WAS THE HOTTEST MONTH EVER RECORDED IN NASHVILLE...

THE AVERAGE TEMPERATURE DURING THE MONTH OF AUGUST 2007 AVERAGED 86.9 DEGREES...WHICH WAS 9.0 DEGREES ABOVE NORMAL. IT WAS 3.6 DEGREES HOTTER THAN THE HOTTEST AUGUST ON RECORD...WHICH WAS IN 1995...AND THE HOTTEST OF ANY MONTH IN 137 YEARS OF RECORD KEEPING. PREVIOUSLY...JUNE OF 1952 WAS THE HOTTEST MONTH ON RECORD...WHEN THE AVERAGE MONTHLY TEMPERATURE WAS 84.7 DEGREES.

THE SUMMER MONTHS OF JUNE THROUGH AUGUST 2007...ENDED UP 4.2 DEGREES ABOVE NORMAL...WHICH IS THE HOTTEST SINCE 1952.

THERE WERE 15 DAYS OF 100 DEGREES AND ABOVE IN NASHVILLE DURING AUGUST 2007. THIS IS THE MOST EVER IN THE MONTH OF AUGUST. THE PREVIOUS RECORD FOR AUGUST WAS 7 DAYS BACK IN 1954.

THE 15 DAYS OF 100 DEGREES AND ABOVE IN NASHVILLE IS ALSO THE MOST EVER RECORDED IN A SINGLE MONTH. THE PREVIOUS RECORD WAS 11 DAYS BACK IN 1952.

A STRING OF 7 CONSECUTIVE DAYS OF 100 DEGREES AND ABOVE BEGAN ON AUGUST 12TH...2007. THIS STRING IS ONLY EXCEEDED BY 8 CONSECUTIVE DAYS BACK IN JUNE OF 1952.

THE 106 DEGREES ON AUGUST 16TH ALSO SET A NEW ALL TIME RECORD HIGH FOR THE MONTH OF AUGUST. THE PREVIOUS RECORD WAS 105 DEGREES SET BACK IN 1930. ALSO...THE 106 DEGREES ON AUGUST 16TH WAS THE HOTTEST TEMPERATURE IN NASHVILLE IN THE LAST 55 YEARS...ONLY SURPASSED BY 107 DEGREES BACK ON JULY 27TH AND JULY 28TH IN 1952.

THERE WAS A RECORD SHATTERING 24 CONSECUTIVE DAYS OF 95 DEGREES AND ABOVE IN NASHVILLE DURING THE MONTH OF AUGUST 2007. A STRING THAT BEGAN ON AUGUST 2ND AND ENDED ON AUGUST 25TH. THE PREVIOUS RECORD WAS 19 DAYS SET IN JUNE 1952.

THERE WAS ALSO A RECORD SETTING STRING OF 34 DAYS OF 90 DEGREES AND ABOVE THAT BEGAN ON JULY 26TH AND ENDED ON AUGUST 28TH. THE PREVIOUS RECORD WAS 31 DAYS SET IN JUNE 1952 AND TIED IN JUNE 1954.

RAINFALL IN NASHVILLE FOR AUGUST TOTALED 1.38 INCHES...MAKING IT THE DRIEST AUGUST SINCE 1996. THE DRIEST AUGUST ON RECORD WAS BACK IN 1929 WHEN ONLY 0.51 INCHES FELL.

THE SUMMER MONTHS OF JUNE THROUGH AUGUST 2007 WAS THE 3RD DRIEST ON RECORD IN NASHVILLE...AND THE DRIEST SINCE 1954. FOR JUNE THROUGH AUGUST...RAINFALL TOTALED 5.22 INCHES. THIS WAS 5.91 INCHES BELOW NORMAL. THE SUMMER OF 1954 WAS THE DRIEST EVER WITH 4.74 INCHES OF RAIN...FOLLOWED BY 1925 WITH 4.94 INCHES.

RAINFALL SINCE JANUARY 1ST HAS TOTALED 18.69 INCHES IN NASHVILLE. THIS IS 13.97 INCHES BELOW THE 30 YEAR NORMAL.

From a Special Weather Statement from Memphis September 1st.....

MIDSOUTH...

RECORD BREAKING HEAT WAS THE MAIN STORY IN AUGUST AS ALL LOCATIONS ACROSS THE MIDSOUTH SURPASSED THE CENTURY MARK FOR SEVERAL DAYS IN A ROW. MANY LOCATIONS BROKE MANY RECORDS IN AUGUST WHICH IN TURN MADE THE MONTH ONE OF THE HOTTEST EVER ON RECORD. MEMPHIS... JONESBORO...JACKSON...AND TUPELO ALL RANK IN THE TOP 5 FOR HIGHEST MAXIMUM...MINIMUM...AND AVERAGE TEMPERATURES FOR AUGUST.

MEMPHIS INTERNATIONAL AIRPORT (KMEM) DATA FROM 1930 TO PRESENT

TOP 5 HIGHEST AVERAGE MAXIMUM TEMPERATURES FOR AUGUST

	AVG HIGH TE	MP YEAR
1.	98.9*	2007*
2.	97.2	1980
	97.2	2000
4.	96.8	1954
5.	96.7	1947

NOTE: AUGUST 2007 IS RANKED 1ST OUT OF ALL MONTHS

JACKSON MCKELLAR SIPES REGIONAL AIRPORT (KMKL) DATA FROM 1948 TO PRESENT

TOP 5 HIGHEST AVERAGE MAXIMUM TEMPERATURES FOR AUGUST

7A	VG HIGH TEMP	YEAR
1.	99.9*	2007*
2.	97.5	1954
3.	96.2	1983
4.	95.8	1980
5.	94.5	1953

NOTE: AUGUST 2007 IS RANKED 1ST OUT OF ALL MONTHS

By the end of August some rainfall was beginning to occur, particularly in the southern Middle Tennessee counties. On the evening of the 25th, Huntland in Franklin County reported 5.01 inches in a single storm. Nearby locations in Lincoln, Bedford, and Franklin counties reported near/over 3 inches. Most locations received less than 0.25" for the same period. Just another instance where CoCoRaHS is so valuable measuring rainfall across the state.

Drought conditions continue to plaque Tennessee. We are in the third year of below normal rainfall and its going to take time and lots of rain to change our situation. Streams in many areas are running at record low rates, many wells are running dry and water restrictions are being enforced in many urban areas. Your observations help to document the severity and extent of this record setting high impact weather. (Adding your "0" on days with no rain adds validity to your monthly report and is extremely important in this situation. The easy way to add the "0's" is click on <u>Monthly Zeros</u> on the <u>My Data</u> page.)

Looking down the road over the next three months we may have near normal rainfall. This may help alleviate the short term effects of the drought but its going to take

a good while to recharge our ground water reservoirs. Your observations help us to track the situation here in Tennessee.

Remember - **Every Drop Counts!** (literally)

Ralph